

Remarks

By the foregoing Amendment, claims 1, 6 and 10 are amended, and new claim 11 is presented. Entry of the Amendment, and favorable consideration thereof is earnestly requested. Applicant respectfully submits that no new matter has been added by these amendments.

The Examiner has rejected claims 1-10 under 35 U.S.C. §102(b) as anticipated by Kaplan et al., "The Role of the Universal Video Intubating System in the Management of the Difficult Airway," Endo-Press, 2000, p. 26 ("the Kaplan article"). The Examiner has further rejected claims 1-5 and 7 under 35 U.S.C. §102(b) as anticipated by Japanese Patent Document No. JP 55-81317 to Shimonaka ("the '81317 reference"). The Examiner has also rejected claims 1-4, 6 and 7 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,329,940 to Adair ("the '940 patent"). The Examiner has rejected claims 1-3 and 8 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,742,819 to George ("the '819 patent"). The Examiner has further rejected claims 8 and 9 under 35 U.S.C. §103 as unpatentable over the '940 patent in view of WO 98/46117 to Chatenever et al. ("the '46117 reference"). The Examiner has also rejected claim 10 under 35 U.S.C. §103 as unpatentable over the '940 patent in view of U.S. Patent No. 5,921,917 to Barthel et al. ("the '917 patent"). These rejections are respectfully traversed.

Applicant has amended claim 10 in response to the Examiner's 35 U.S.C. §112, second paragraph rejection.

Amended claim 1 of the present invention requires, among other elements, an endoscope having shaft being substantially bend-resistant and having a continuously curved portion followed by a straight portion. This amendment is supported by the

specification and no new matter has been added. (Page 10, first and second full paragraphs.)

Applicant respectfully submits that the Kaplan article was mistakenly listed on the Information Disclosure Statement and has a publication date of September 29, 2000 as is listed on the inside of the front cover and is not prior art to the present application, which has a filing date of July 10, 2001.

The '81317 reference discloses the use of a "hard insertion part 4 to be connected to a gripping part 3." (The '81317 reference, English translation of "CONSTITUTION.") Nowhere does the '81317 reference disclose the utilization of a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion as required by amended claim 1. (See the '81317 reference, Figures 3 and 4.) Two specific advantages are realized in the configuration claimed in claim 1. First, the present invention provides a significant medical advantage over the cited prior art. The shaft configuration of the present invention is "particularly advantageous for intubation of newborn babies." (Page 6, first full paragraph.) Whereas, flexible or malleable shaft members, are disadvantageous for use with newborn infants because of difficult anatomical considerations common to newborn infants. (Page 5, first and second paragraphs.) Rather, because intubating newborn babies presents many challenges that may not be associated with intubating adults, a bend-resistant and continuously curved shaft extending from the very end of the distal end of the shaft is desired. The second advantage the present invention presents is a significant mechanical advantage over the cited prior art. For instance, malleable or semi-malleable shaft members are undesirable because repeated bending and deformation of the shaft member will cause a decline in the quality of the instrument over time and

will eventually result in the complete mechanical failure of the scope. The shaft member of the present invention is bend-resistant and "has a form stability such that when used for its intended purpose, i.e., intubation, it does not bend." (Page 10, fifth full paragraph.)

Therefore, because claim 1 requires a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion and the '81317 reference does not disclose this element, it cannot anticipate claim 1.

Unlike the present invention, the '940 patent also does not disclose a system utilizing a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion as required by amended claim 1. Rather, the '940 patent discloses that "[t]he malleable insertion section can be bent by the attending medical personnel for providing a custom fit for the patient at hand." (The '940 patent, abstract.) The '940 patent further discloses that "[d]uring the intubation process the flexible endotracheal tube must be traversed through the mouth." (The '940 patent, col. 2, lines 41-42.) Having a malleable insertion section is disadvantageous because the stylet in which the image and light bundles are placed within is subject to breakage and kinks after a limited number of bends. Therefore, because claim 1 requires a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion and the '940 patent does not disclose this element, it cannot anticipate claim 1.

The '819 patent too fails to disclose a system utilizing a shaft that is substantially bend-resistant and has a continuously curved portion followed by a straight portion. For instance, as the Examiner has noted, the '819 patent discloses "a semi-malleable or flexible tube containing the fiber optic bundles of the fiber optic system." (The '819 patent, col. 2, lines 53-55.) As the Examiner has noted, Figures 1 and 2 show the semi-malleable or flexible tube in both straight and curved configurations. Looking at Figure

4, it can also be seen how the tube is flexible, and further, Figure 8 shows the flexible tube as it is inserted into a patient. Therefore, because claim 1 requires a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion and the '940 patent does not disclose this element, it cannot anticipate claim 1.

Applicant respectfully submits that neither the '46117 reference nor the '917 patent disclose the use of a shaft that is substantially bend-resistant and has a continuously curved portion followed by a straight portion. Rather, the '46117 reference shows partial sections of endoscope shafts in Figures 1, 5 and 6 that are straight configurations. Likewise, the '917 patent discloses the use of a "a flexible fiber optic bundle extending from the forward section and having a distal end." (The '917 patent, col. 2, lines 60-61.) Therefore, because neither the '46117 reference nor the '917 patent teach, disclose or suggest the use of a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion, they cannot render claim 1 obvious.

Amended claim 1 of the present invention requires, among other elements, an endoscope having shaft being substantially bend-resistant and having a continuously curved portion followed by a straight portion. The combination of the continuously curved portion with the straight portion provides significant use and constructive advantages over the cited prior art. (Page 6, second through fifth full paragraphs.) In addition, failure due to repeated bending and fatiguing of the shaft member is also avoided. Further, providing a continuously curved shaft member, the curvature beginning at the very end, extending from the distal end to a transition point along the shaft provides technical advantages not disclosed in the prior art. (Page 5, paragraph 3; Page 6, paragraph 6.) Therefore, Applicant respectfully submits that none of the cited prior art references, alone or in any

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combination, teach, disclose or suggest the use of a substantially bend-resistant shaft that has a continuously curved portion followed by a straight portion.

It is respectfully submitted that claims 1-11, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,



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